IN THE CLAIMS

The present claims remain unamended by this paper.

1. (Previously Presented) A method for use in forming a read sensor for a magnetic head, comprising:

forming a protective layer over a plurality of read sensor layers;

forming a first photoresist structure in a central region over the read sensor layers;

etching the read sensor layers such that end portions of the read sensor layers are removed and a central portion remains underneath the first photoresist structure, to thereby define a stripe height for the read sensor;

forming an insulator layer around the read sensor where the end portions were removed;

removing the first photoresist structure through mechanical interaction with a chemical-mechanical polishing (CMP) pad;

removing the protective layer through etching;

forming a second photoresist structure in a central region over the read sensor layers; and

etching the read sensor layers such that the end portions of the read sensor layers are removed and a central portion remains underneath the second photoresist structure, to thereby define a trackwidth for the read sensor.

2. (Previously Presented) The method of claim 1, wherein the photoresist structure is formed without an undercut.

3. (Canceled)

4. (Previously Presented) The method of claim 1, further comprising:

depositing hard bias and lead layers around the read sensor; and

removing the second photoresist structure through mechanical interaction with a CMP pad.

5. (Canceled)

6. (Previously Presented) The method of claim 1, wherein the act of removing the first photoresist structure comprises mechanically compressing the first photoresist structure with the CMP pad.

7. (Canceled)

8. (Previously Presented) The method of claim 1, wherein the protective layer comprises a first protective layer and the method further comprising:

prior to removing the first photoresist structure, forming a second protective layer over materials which surround the read sensor layers; and

wherein the materials comprise insulator materials.

9. (Previously Presented) The method of claim 1, further comprising:

prior to removing the first photoresist structure, forming a second protective layer over materials which surround the read sensor layers to a thickness of between about 100 – 200 Angstroms.

10. (Previously Presented) The method of claim 1, wherein the protective layer comprises a first protective layer and the method further comprising:

prior to removing the first photoresist structure, forming a second protective layer over materials which surround the read sensor layers; and

wherein the first and the second protective layers comprise carbon.

11. (Previously Presented) The method of claim 1, wherein the protective layer comprises a first protective layer and the method further comprising:

prior to removing the first photoresist structure, forming a second protective layer over materials which surround the read sensor layers; and

wherein the first and the second protective layers comprise carbon having a hardness of about 22 GPa.

12. (Previously Presented) A method for use in making a read sensor for a magnetic head, comprising:

defining a stripe height for the read sensor by:

forming a first protective layer over a plurality of read sensor layers;

forming a first photoresist structure in a central region over the read sensor layers;

etching the read sensor layers such that end portions of the read sensor layers are removed and a central portion remains underneath the first photoresist structure;

forming a second protective layer around the central portion;

removing the first photoresist structure through mechanical interaction with a chemical-mechanical polishing (CMP) pad;

removing the first and the second protective layers through etching;

subsequently defining a trackwidth for the read sensor by:

forming a second photoresist structure in a central region over the read sensor layers;

etching the read sensor layers such that end portions of the read sensor layers are removed and a central portion remains underneath the second photoresist structure; and

removing the second photoresist structure through mechanical interaction with a CMP pad.

13. (Previously Presented) The method of claim 12, further comprising:

after etching the read sensor layers with use of the first photoresist structure, forming an insulator layer around the read sensor where the end portions were removed.

14. (Previously Presented) The method of claim 12, further comprising:

after etching the read sensor layers with use of the first photoresist structure, forming an insulator layer around the read sensor where the end portions were removed; and

after etching the read sensor layers with use of the second photoresist structure, forming hard bias and lead layers around the read sensor where the end portions were removed.

15. (Previously Presented) The method of claim 12, wherein the first and the second photoresist structures are formed without undercuts.

16. (Previously Presented) The method of claim 12, wherein the act of removing the first photoresist structure comprises mechanically compressing the first photoresist structure with the CMP pad.

17. (Canceled)

18. (Previously Presented) The method of claim 12, wherein the first and the second protective layers comprise carbon.

19. (Canceled)

20. (Canceled)

21. (Previously Presented) The method of claim 12, wherein the first and the second protective layers comprise carbon having a hardness of about 22 GPa.

22. (Previously Presented) The method of claim 12, wherein the first and the second protective layers are formed with a thickness of between about 100 – 200 Angstroms.

23. (Previously Presented) A method of forming a read sensor of a magnetic head, comprising:

forming a photoresist without undercuts in a central region over a plurality of read sensor layers;

forming a first protective layer below the photoresist;

etching the read sensor layers such that end portions of the read sensor layers are removed and a central portion remains underneath the photoresist, to thereby define a stripe height for the read sensor;

forming an insulator layer around the read sensor where the end portions were removed;

forming a second protective layer around the central portion;

removing the photoresist through mechanical interaction with a chemical-mechanical polishing (CMP) pad; and

removing the first and the second protective layers through etching.

24. (Previously Presented) The method of claim 23, wherein the photoresist comprises a first photoresist and the method further comprises:

after defining the stripe height for the read sensor:

forming a second photoresist without undercuts in a central region over the read sensor layers; and

etching the read sensor layers such that end portions of the read sensor layers are removed and a central portion remains underneath the second photoresist, to thereby define a trackwidth for the read sensor.

25. (Previously Presented) The method of claim 23, wherein the photoresist comprises a first photoresist and the method further comprises:

after defining the stripe height for the read sensor:

forming a second photoresist without undercuts in a central region over the read sensor layers;

etching the read sensor layers such that end portions of the read sensor layers are removed and a central portion remains underneath the second photoresist, to thereby define a trackwidth for the read sensor; and

removing the second photoresist through mechanical interaction with a CMP pad.

26. (Previously Presented) The method of claim 23, wherein the first and the second protective layers comprise carbon.

27. (Previously Presented) The method of claim 23, wherein the first and the second protective layers comprise carbon having a hardness of about 22 GPa.

28. (Previously Presented) The method of claim 23, wherein the first and the second protective layers are formed to a thickness of between about 100 – 200 Angstroms.

29. (Previously Presented) The method of claim 23, wherein the first and the second protective layers are formed over the read sensor layers.

30. (Previously Presented) The method of claim 23, wherein the first and the second protective layers are formed over the read sensor layers and surrounding insulator materials.